New Jersey Agricultural **Experiment Station** 

# ISIC

Family and Community Health Sciences

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## **Cooperative Extension**

# **Growing Healthy in New Jersey**

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f I he Family and Community Health Sciences (FCHS) Department of Rutgers Cooperative Extension has collaborated with the New Jersey Department of Agriculture to secure a \$340,250 Team Nutrition Training Grant from the United States Department of Agriculture. This two-year grant, which began on September 30th, will be used to train foodservice professionals, increase fruit and vegetable consumption through school gardens and Farm to School programs, and promote the use of locally grown produce in school meals.

The state Division of Food and Nutrition at the New Jersey Department of Agriculture invited the FCHS Department to write the grant proposal, "Grow Healthy New Jersey: A Team Nutrition Initiative," to demonstrate its continued commitment to improving the nutritional habits of New Jersey's schoolchildren. The project will enable FCHS to work with nine pilot schools, each of which will be required, as one part of the project, to plant a garden. The school gardens will be utilized in turn to promote fruit and vegetable consumption through fun, interactive lessons and activities which will link classroom education to the foods served in the cafeteria.

School gardens have been found to be an innovative tool with which to incorporate nutrition and physical activity education into health curricula. The following are ten ideas to use school gardens to teach about healthy lifestyles:

## **Nutrition/Food Safety:**

- 1- Discuss MyPyramid recommendations for daily servings of fruits and vegetables needed for good health. Use fruits and vegetables grown in the garden to illustrate how portions can add up. Have children track portions eaten at school and at home.
- 2- Plant vegetables of different colors and shapes, and discuss the different tastes, textures, and overall health benefits of "eating a rainbow" of fruits/vegetables (i.e. vitamins, minerals, fiber, phytochemicals).
- 3- Identify the different parts of the plants we eat: roots, stems, leaves, fruits, seeds, and give examples of favorite foods representing each of these plant parts (ex. broccoli florets are flowers, strawberries and tomatoes are fruits, celery is a stem, etc.).
- 4- Discuss organic versus non-organic methods of gardening, and the potential risks/benefits to human health and the environment. Study how organic gardening influences crop yield, pest and weed control, etc.
- 5- Demonstrate good food safety practices when harvesting and preparing garden foods (i.e. hand washing, proper washing of produce, safe storage, etc.).
- 6- Promote tasting and sampling of new and different fruits and vegetables in school. Coordinate with the school cafeteria to feature a new fruit/vegetable on a regular basis.

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# **Baby Food Made With Love**

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an you۔ imagine a time when there was no such thing as baby food sold in jars? No grocery store shelves with hundreds of varieties to

choose from? Hard to imagine, isn't it? Commercial baby food didn't get its start until 1928 when Gerber® introduced strained fruits and vegetables to the national market. Beech-Nut® followed in 1935. Though it was commercially available, many older adults today remember when making baby food was something you did in your own kitchen with fresh fruits and vegetables bought daily at the neighborhood market. Commercial baby food is convenient and nutritious but there is growing interest in making your own. Home-made baby food may help cut food costs and will help your baby get used to foods the family eats.

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Let's look at the progression of infant feeding as advised by the American Academy of Pediatrics (AAP). It recommends exclusive breastfeeding for baby's first 6 months with few exceptions. Exclusive breastfeeding provides many health benefits to baby and mother, among which is improved protection against disease. The AAP recommends the introduction of solid foods at around 6 months. From 8-12 months the baby can enjoy table foods using his new developmental skills of moving his tongue from side to side, chewing, and grasping small bits of food with the thumb and pointer fingers.

Making your own baby food involves knowing what to feed and how to prepare, store, warm and serve the food safely. New foods should be introduced individually to help identify signs of food allergy.

What to Feed: Begin with fruits or vegetables – fresh, frozen or canned without added salt, sugar, fat, or spices. Choose non-citrus fruits like bananas, pears, peaches or applesauce. Potatoes, sweet potatoes, green beans, peas, or winter squash are good vegetable options.

**Preparation:** Start with clean hands, workspaces, and equipment (blender, food mill, or strainer). Scrub the fruit or vegetable under cool water. Remove the skin, seeds and pits. Steam or boil in a covered saucepan with a small amount of water until soft. Puree or mash with a fork. Check for large lumps and cool before feeding. Add liquids such as cooking water, breast milk or formula if the food is thick or dry. **DO** NOT ADD HONEY OR CORN SYRUP AS THESE MAY CAUSE INFANT BOTULISM, A SERIOUS FORM OF FOOD POISONING.

Storage: If not used immediately refrigerate food for up to 2 days or freeze in individual portion sizes. Pour cooled food into an ice cube tray, cover, and freeze. After cubes are frozen, wrap in a plastic freezer container or bag and date it. Fruits and vegetables can be frozen for 6-8 months.

Warming: Warm refrigerated food by placing in a small dish placed into a saucepan on the stove over low heat, stirring often. If microwaving, stir often to avoid "hot spots". Frozen foods can be thawed in the refrigerator, under cold running water, or in the microwave using the defrost mode.

**Serve:** Serve and throw away any leftovers.

Made with love!

# Have a Happy & "Healthier" Holiday this Year

Heather Behan B.S., Montclair State University Dietetic Intern

Karen Ensle EdD, RD, FADA, CFCS, Preceptor & Family & Community Health Sciences Educator, Union County

 $oldsymbol{\mathsf{D}}$ uring the holiday season it is too easy to fall into the trap of overindulging, then regretting the extra weight gain, but there are simple solutions to this annual problem, which can be made without losing the joy of the season. Try the following tips, or even just pick one, to make your holiday celebration healthier.

- Offer to bring a healthy dish, if you are attending a holiday party. This ensures that there will be a guilt-free dish available.
- Avoid arriving to the party on an empty stomach. This will increase the likelihood of consuming food too fast and serving yourself more then you need.
- Limit pre-meal snacks and alcohol. This is a simple way to cut the calories of the day and allow you to save room for the main meal.
- Take smaller portions and eat slowly. Concentrate on family conversation and take this time to enjoy your company. This will help to slow your eating and give you time to identify when you are full.
- Stay hydrated with plenty of water and low-calorie beverages. This can help you to feel fuller quicker and may reduce the likelihood of overeating.
- Get up from the table and clear your plate, once you have finished eating. This will break the concentration on the food in front of you. If you choose to linger and converse at the table, do so, but make a conscious effort not to reach for seconds.
- Invite the family on a walk before dessert; use some of the energy from the meal.

Holiday recipes are often high in calories and fat, but you do not have to completely deprive yourself of you favorite holiday treats, in order to have a healthier holiday this year. The following list offers substitutes that can easily be made in existing recipes, for your healthier holiday celebration.

- Substitute applesauce or fruit puree for half of the butter or oil in your holiday cookies or baked goods.
- Substitute whole-wheat flour for bleached all-purpose flour in your holiday recipes.
- Substitute cocoa for chocolate in holiday baked goods. (typically 3 ounces of cocoa can replace 1 ounce of chocolate in most recipes)
- Substitute canned pumpkin for the heavy cream and butter in mashed potatoes. Add your favorite holiday spices for a surprising new dish.
- Substitute vegetable or chicken broth for the oil used to sauté meat or vegetables.

These simple tips will help to make this holiday season happy and healthier.

MyPyramid.gov

STEPS TO A HEALTHIER YOU

Holiday



## For More Information And Great Holiday Links Visit:

http://snap.nal.usda.gov/nal\_display/index.php?info\_center=15&tax\_level=4&tax\_subject=261&topic\_id=21 31&level3\_id=6591&level4\_id=11032&level5\_id=0

http://www.mayoclinic.com/health/healthy-recipes/NU00585

http://www.mypyramid.gov/holiday-healthycooking.html





# Get Moving, Get Healthy and Protect Your Family in Winter Months

Joanne Kinsey, MS, CFCS, Family & Community Health Sciences Educator Atlantic & Ocean Counties

 $oldsymbol{1}$  he winter weather brings with it many special challenges, and it's a good time to pay attention to your health. As we spend more time indoors, there is a greater chance of spreading harmful diseases. It is also the time to make healthful food choices, get sufficient exercise and make sure you get enough sleep so you prevent the common cold and other winter illnesses.

- It is a good time to schedule your medical check-ups, vaccinations and other medical appointments.
- Trying to maintain an active lifestyle can also be a challenge when the weather turns chilly. Getting fresh air and being active outside, even if the air and wind are brutally cold is important for your body. Try to stay warm and protect your skin from the sun to prevent overexposure.
- Dress warmly in several layers of loose-fitting, tightly woven clothing. Keep your hands, legs, feet and head fully covered to keep your body safe from frost bite. Add a hat and gloves when planning on spending time outdoors. Use a liberal amount of sunscreen of SPF 15 or higher everyday before going outdoors. Be sure to reapply sunscreen every 2 hours while jogging, skiing, ice skating or sledding.
- Maintain a routine of physical activity throughout the winter. Stay active for at least 2-1/2 hours per week, and encourage children and teens to be active for at least 1 hour each day.
- Teach children not to venture out onto frozen ponds and lakes without checking with an adult about the safety of the ice.



Home safety becomes an issue as we decorate and entertain more often in our homes. Be mindful of food safety when entertaining and with holiday food leftovers. Whether traveling across town or a distance to see friends and relatives, the family should consider a few travel safety precautions. Below are a few tips to protect yourself and your family during the cold winter months:

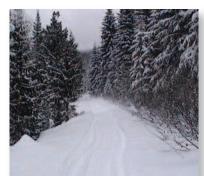
- Wash your hands often because keeping them clean can avoid spreading germs. Be sure to wash hands with soap and running water for at least 20 seconds.
- Holidays are wonderful times for get-togethers with family & friends if you follow a few simple food safety rules. Keep counter surfaces clean and avoid cross-contamination by keeping raw meat, poultry, seafood and eggs away from ready-to-eat foods. Cook foods to the proper temperature, refrigerate promptly, and do not leave perishable foods at room temperature for more than 2 hours.
- Injuries often occur in the home due to carelessness or not checking for possible fire or other safety hazards. Winter is a time to use candles safely, tend to the fireplace and stove by having it checked and cleaned as necessary, and installing smoke detectors and carbon monoxide detectors on all floors in your home. Be sure to check monthly that detectors are working properly and replace batteries twice per year.
- Protect yourself while in a motor vehicle by wearing a seat belt. Be sure to buckle children into a child safety seat, booster seat or seat belt according to their height, weight and age.
- Be prepared for weather-related emergencies by stocking up your food shelves with a small supply that needs no cooking like canned milk, fruit, peanut butter and jelly along with crackers and bottled water. Have an up-todate emergency kit that includes batteries, a flashlight, extra medications, baby care supplies, and cat litter or sand for icy sidewalks.

## For additional information check these websites

CDC: Be Prepared, Staying Safe and Healthy in Winter Months http://www.cdc.gov/Features/WinterWeather/

CDC Family Health: Holiday Health and Safety Tips http://www.cdc.gov/family/holiday/









# What you need to know about Salmonella and eggs

Dane Jensen, Graduate Assistant, Rutgers Food Science Department, Donald W. Schaffner, Ph.D. Extension Specialist in Food Science

 $\Gamma$  he recent *Salmonella* Enteritidis outbreak has many people scrambling to remove eggs from their kitchens in hopes to avoid the dangerous pathogen. But before you indiscriminately toss any ovoid shaped object in your fridge, take a few seconds to separate hype from fact. During July 2010, the CDC noticed an increase of Salmonella Enteritidis in PulseNet, the national public health network that collects and analyzes bacterial genetic fingerprints. The CDC was able to determine that contaminated eggs were the cause of the illnesses. Two major egg farms located in Iowa, Wright County Egg and Hillandale Farms, were shut down until further investigations could be completed and safety could be guaranteed. The recall included roughly a half billion eggs and is considered the largest recall of eggs in U.S. history. From May 1 to October 15, 2010, more than

three thousand illnesses in 10 states were associated with the contaminated eggs.

### Am I still at risk?

The risk of Salmonella from contaminated eggs is slim. As

of late August, over a half billion eggs were recalled and the offending farms were prevented from selling eggs until further notice. With Hillandale Farm's commitment to following the new safety protocols set forth by the FDA, they have been given the green light to produce eggs again, but Wright County Farms is not allowed to sell eggs to the general public at the time of publication.

## Does eating organic eggs reduce my risk of ingesting a pathogen?

The debate of whether organic eggs are safer is an ongoing social, political, academic, and economic debate. However there is no proof that organic eggs are safer from Salmonella than non-organic eggs.

## Are there noticeable signs when eggs are contaminated with Salmonella?

In short, no, but looking for expiration dates, broken shells, notable odors, and discoloration can reduce your risk. Remember to check your eggs carefully before you buy them.

## What can I do to protect myself from Salmonella and other foodborne pathogens?

- ✓ Wash your hands properly before preparing or eating food
- ✓ Be sure your fridge is set to a temperature of 41°F
- ✓ Regularly clean and replace dishcloths and sponges
- ✓ Discard any food that is past it's expiration date
- ✓ Cook eggs until the yolks are firm
- ✓ Cook scrambled eggs and omelets to a temperature of 160°F

## **Nutrition and Autism**

Carol Byrd-Bredbenner, PhD, RD, FADA Professor of Nutrition/Extension Specialist

Autism Spectrum Disorder (ASD) is a complex, lifelong developmental disorder that affects millions around the world. Autism tends to be diagnosed during early childhood. It affects brain function, especially social and communication skills. Symptoms include delayed talking, unusual speech patterns, lack of eye contact, repetitive behaviors, short attention span, and sensory problems. Sensory problems may range from hypersensitivity (overly responsive to smells, flavors, colors, light, and other stimuli) to hyposensitivity (no response to stimuli).

Children with autism frequently have unusual eating behaviors that can cause health concerns. Food taste, smell, color, and/or texture may cause hypersensitive children to restrict or avoid certain foods or groups of

foods and be unwilling to try new foods. Some children with autism restrict themselves to 5 foods or less. Insufficient food intake may result from hypersensitivity as well as an inability to stay focused long enough to finish a meal. Some medications used to treat autism also can depress appetite and reduce food intake. Other medications may enhance appetite and lead to excessive

calorie intake and/or reduce absorption of certain vitamins and minerals. Constipation, another common difficulty, may be caused by eating a restricted diet.

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# Salmonella in Salami and Spices

Xubo Zhao, (Visiting Scientist) and **Donald W Schaffner, Ph.D.**, (Extension Specialist in Food Science)





An unusual outbreak linked to Salmonella was in the news in the early part of 2010. According to information released by the Centers for Disease Control and Prevention (CDC), back in August/September

of 2009, the CDC's bacterial DNA fingerprinting database (PulseNet) began to show signs of an increase in the number of cases of a particular kind of Salmonella called Montevideo, that has a very common DNA fingerprint. Without any additional leads to go on, the CDC continued to monitor for additional cases.

Most people who contract salmonellosis develop diarrhea, fever, and abdominal cramps 12-72 hours after infection and the illness typically lasts from 4 to 7 days. Although most people recover without antibiotics or any other treatment, some aren't so lucky. Infants, the elderly or those with weakened immune systems may be more severely affected. In serious cases, Salmonella may spread to the blood and then throughout the body. Death can occur without prompt treatment with antibiotics.

In November 2009 the database showed a further increase in the number of cases of the common form of Salmonella. The CDC Outbreak Response Team began to quickly coordinate further investigations. Finally in January 2010, investigators got a break in the case! Washington State Department of Health investigators who had obtained shopper club card records, discovered that 5 of 7 ill persons from Washington State had purchased the same brand of Italian salami. The next day, Health Department

investigators from Rhode Island visited the processing plant that made the salami. With the important lead that salami might be the cause, additional statistical analysis confirmed that many of the ill people had indeed eaten this same brand of salami.

Within a week of the visit to the Rhode Island processing plant, inspectors, recalled 1.3 million pounds of the implicated salami. The food processor expanded this recall three more times over the next month to insure that all potentially contaminated salami was removed from home refrigerators and store shelves.

Rhode Island inspectors continued their search to isolate the outbreak strain of the bacteria from unopened containers of crushed red pepper from one spice wholesaler and whole black pepper supplied by a different wholesaler. Once spices had been identified as the ultimate cause, those two wholesalers issued their own recalls, leading to further recalls of a variety of different food products. A full list is available on the FDA website http://www.fda.gov/ food/newsevents/whatsnewinfood/ucm206052. Since the spices appear to have been added to the salami after it had been processed using a typical heat treatment, (which would kill any Salmonella normally present) the bacteria were able to survive and cause the salmonellosis upon consumption.

By the time the dust had settled, 272 individuals from 44 states and the District of Columbia were infected with the outbreak strain of Salmonella Montevideo. Thankfully, no deaths have occurred according to CDC. For more information on the investigation go to http://cdc.gov/ salmonella/montevideo/index.html.

## **Nutrition and Autism**

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Both the cause and cure of autism are not known. Treatment tends to include educational programs, behavioral treatments, developmental therapies, and medications. Although there is little scientific evidence to indicate they are effective, complementary and alternative therapies are commonly used. These therapies include using vitamin, mineral, and omega-3 supplements as well as restricting food allergens, yeast, gluten, and casein.

The most popular nutrition intervention is a diet free of gluten (a protein in wheat, rye, and barley) and casein (a protein in milk). It is hypothesized that some autism symptoms are caused when casein or gluten are digested. Increased permeability of the intestine (called leaky gut syndrome) can allow segments of these proteins to enter the bloodstream and cross into the

brain where it is thought that they affect the nervous system and cause symptoms associated with autism. Removing casein and gluten from the diet is hypothesized to reduce symptoms. A diet free of dairy and

wheat can be difficult to follow and, without careful planning, may provide insufficient nutrients, especially protein and calcium.

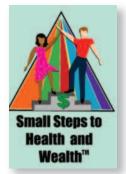
Studies are underway to determine the usefulness of diet therapies in the treatment of autism. Until then, those considering a gluten-free, casein-free diet or other diet therapies, should work closely with health care providers, including a registered dietitian, to be certain the diet includes adequate amounts of all nutrients.

Learn more at: http://health.nih.gov/topic/Autism



# Challenge Yourself to Better Health and Increased Wealth

Barbara O'Neill, Extension Specialist in Financial Resource Management



f I his is the time when many people set resolutions to improve their lives during the following year. Losing weight, exercising, paying off debt, and saving money perennially top the list of desired changes. Where people often fail, however, is in putting actions to achieve those resolutions into daily practice. That's where Rutgers Cooperative Extension's Small Steps to Health and Wealth™ Challenge comes into play.

Each year, Rutgers Cooperative Extension creates a new online Small Steps to Health and Wealth™ Challenge that runs for an entire year through December 31. It is not part of an official competition with prizes, but it is a way for people to track their progress and have their points tallied online.

To sign up for the SSHW Challenge, follow the link for Challenges on the Small Steps to Health and Wealth™ Web site at http://njaes.rutgers.edu/sshw/. Set up a user name and password and download a simple one-page user's guide with instructions about how to proceed. Enroll in the Challenge title "Non-Competitive Annual Personal SSHW Challenge." Each day, boxes will appear for users to report their performance of recommended health and financial practices with a simple click of a mouse.



The SSHW Challenge is part of Small Steps to Health and Wealth M, a national Cooperative Extension program developed to motivate Americans to take action to simultaneously improve their health and personal finances. SSHW was built around a framework of 25 research-based behavior change strategies. The Challenge was originally developed in a "paper and pencil" format and is now available online. A paper tracking form can still be downloaded, however, to



track activities before points are entered into a computer. Some people might also decide to just use the paper forms and not enter online data.

It has been well documented that, when people monitor their behavior and measure their how they're doing, they are often inspired to do better and achieve positive results. Users have seven days from a specific date to enter their points (e.g., by January 8 for health and financial activities performed on January 1) so they do not have to have daily computer access to use the SSHW Challenge Web site.

The SSHW Challenge is based on the performance of ten recommended practices on a daily basis: five that involve health and nutrition and five that involve financial management. Ten points are given for performing each one for a maximum of 700 points per week.

The five daily health and nutrition practices are: eat at least 4 cups of fruits and vegetables; get at least 30 minutes of exercise; drink water or unsweetened beverages instead of sugarsweetened beverages; walk 10,000 or more steps with a pedometer; and learn something new about health and nutrition.

The five daily financial management practices included in the SSHW Challenge are: save a \$1 bill (or more) and/or pocket change; invest \$5 or more per day (including automated retirement savings plan deposits); track money spent throughout the day; eat lunch prepared at home; and learn something new about personal finance.

As users enter their personal data, they will see their point totals for each day of the week and for each of the ten activities described above. They'll also see a bar graph that compares their personal progress to the average scores of everyone else who is using the Noncompetitive Challenge Web site.

Doing even one of the ten recommended daily practices is a great way to get started on the path to better health and improved financial security. The more SSHW Challenge activities that are performed by users, the better. Want to improve your life and keep your New Year's resolutions in 2011? Take the Small Steps to Health and Wealth<sup>TM</sup> non-competitive SSHW Challenge at: http://njaes.rutgers.edu/sshw/.

## **Growing Healthy in New Jersey**

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## **History/Culture/Sustainable Agriculture:**

- 7- Plant vegetables that are commonly used in different cultures, and discuss how they are prepared and eaten. Share favorite family recipes and traditions.
- 8- Discuss the origins of some of the plants we eat. Which plants are native? Which ones are grown in other parts of the world? Discuss some of the historical foods eaten in North America, such as corn, beans, and pumpkins, as well as their nutrition. Grow a three-sisters garden.
- 9- Discuss the possible environmental benefits of choosing locally grown produce to that which is transported a long distance. Use this as an opportunity to discuss potential changes in nutrition that take place in foods: compare fresh picked, frozen, canned, raw vs. cooked, etc.

## **Physical Activity:**

10- Discuss the health benefits of "life-style" physical activities, such as gardening. Have children identify the different muscle groups that are used in various gardening activities. Research how many calories are burned for each half hour of work in the garden. Keep a physical activity log.

# Resources for implementing school gardens:

- National Gardening Association website: materials, books, activities, grant opportunities: http://www.garden.org/
- National Farm to School Network website: national and state information on FTS, resources, policy, advocacy, funding opportunities. http://www.farmtoschool.org/aboutus.php
- School Garden Weekly website: lessons, activities, curricula http://schoolgardenweekly.com/
- USDA Agriculture in the Classroom website: many education resources http://www.agclassroom.org/index.cfm
- NJ Farm to School Network website: What's happening in NJ regarding FTS, resources, events listing: http://njfarmtoschool.org/#

